

(19) World Intellectual Property
Organization
International Bureau



542572

(43) International Publication Date
5 August 2004 (05.08.2004)

PCT

(10) International Publication Number
WO 2004/066318 A1

(51) International Patent Classification⁷: **H01B 3/20**,
3/44, 3/22

(21) International Application Number:
PCT/EP2004/000242

(22) International Filing Date: 15 January 2004 (15.01.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/EP03/00482 20 January 2003 (20.01.2003) EP

(71) Applicant (for all designated States except US): **PIRELLI & C. S.p.A.** [IT/IT]; Via Gaetano Negri, 10, I-20123 Milano (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **PEREGO, Gabriele** [IT/IT]; Pirelli Cavi e Sistemi Energia S.p.A., Viale Sarca, 222, I-20126 Milano (IT). **SCELZA, Cristiana** [IT/IT]; Pirelli Cavi e Sistemi Energia S.p.A., Viale Sarca, 222, I-20126 Milano (IT). **DELL'ANNA, Gaia** [IT/IT]; Pirelli Cavi e Sistemi Energia S.p.A., Viale Sarca, 222, I-20126 Milano (IT). **BELLI, Sergio** [IT/IT]; Pirelli Cavi e Sistemi Energia S.p.A., Viale Sarca, 222, I-20126 Milano (IT).

(74) Agents: **GIANNESI, Pier, Giovanni et al.**; Pirelli & C. S.p.A., Viale Sarca, 222, I-20126 Milano (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

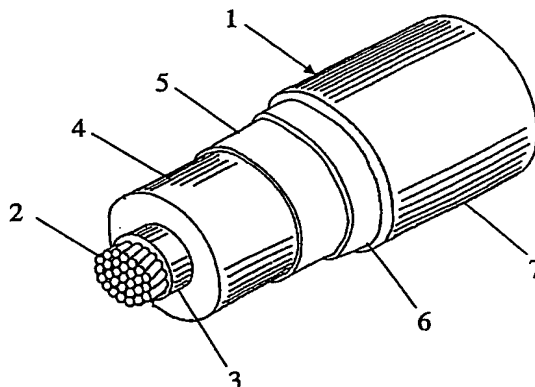
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG,

[Continued on next page]

(54) Title: CABLE WITH RECYCLABLE COVERING LAYER



(57) Abstract: Cable comprising at least one electrical conductor and at least one extruded covering layer based on a thermoplastic polymer material in admixture with a dielectric liquid, wherein: said thermoplastic polymer material is selected from: (a) at least one propylene homopolymer or at least one copolymer of propylene with at least one olefin comonomer; (b) a mechanical mixture comprising at least one propylene homopolymer or copolymer (a) and (c) at least one elastomeric copolymer of ethylene with at least one aliphatic α -olefin, and optionally a polyene. The cable of the invention possesses good mechanical and electrical properties, including high dielectric strength, in particular enabling it to be used at high operating temperature.

WO 2004/066318 A1